Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

# PROCEEDINGS

OF

# The Academy of Natural Sciences

OF

# PHILADELPHIA

---

VOLUME LXV

---

1913

PHILADELPHIA :
THE ACADEMY OF NATURAL SCIENCES
LOGAN SQUARE
1914

THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA.

FEBRUARY 4, 1914.

I hereby certify that printed copies of the PROCEEDINGS for 1913 were mailed as follows:—

| | | | |
|---|---|---|---|
| Pages | 1–80 | April | 4, 1913. |
| " | 81–112 | April | 23, 1913. |
| " | 113–150 | April | 30, 1913. |
| " | 151–182 | June | 4, 1913. |
| " | 183–214 | June | 14, 1913. |
| " | 215–262 | July | 1, 1913. |
| " | 263–390 | July | 15, 1913. |
| " | 391–406 | July | 24, 1913. |
| " | 407–486 | August | 13, 1913. |
| " | 487–504 | August | 19, 1913. |
| " | 505–552 | November | 19, 1913. |
| " | 553–568 | November | 22, 1913. |
| " | 569–616 | December | 17, 1913. |
| " | 617–712 | January | 28, 1914. |

EDWARD J. NOLAN,
*Recording Secretary.*

---


**PUBLICATION COMMITTEE:**

HENRY SKINNER, M.D., Sc.D., WITMER STONE, A.M., Sc.D.,
HENRY A. PILSBRY, Sc.D., WILLIAM J. FOX,
EDWARD J. NOLAN, M.D.
*The President,* SAMUEL GIBSON DIXON, M.D., LL.D., *ex-officio.*

EDITOR: EDWARD J. NOLAN, M.D.

# CONTENTS.

*For Announcements, Reports, etc., see General Index.*


PAGE

BAKER, FRED. The land and fresh-water mollusks of the Stanford Expedition to Brazil (Plates XXI–XXVII) ..... 618

BANKS, NATHAN. Notes on the types of some American spiders in European collections (Plates XI, XII, XIII) ..... 177

Notes on some Costa Rican Arachnida (Plates XXVIII–XXX) ..... 676

BARBOUR, THOMAS. Reptiles collected by the Yale Peruvian Expedition of 1912 (Plate XVII) ..... 505

BERRY, S. STILLMAN. Notes on some West American cephalopods ..... 73

BILGRAM, HUGO. The critical point of liquids ..... 582

BOYER, CHARLES S. On diatoms of Philadelphia ..... 581

BROWN, AMOS P., PH.D. Variation in two species of Lucidella from Mexico (Plate I) ..... 3

Notes on the geology of the Island of Antigua (Plates XVIII, XIX, XX) ..... 584

BROWN, AMOS P., and HENRY A. PILSBRY. Two collections of Pleistocene fossils from the Isthmus of Panama ..... 493

CALVERT, PHILIP P., PH.D. The fossil Odonate Phenacolestes, with a discussion on the venation of the legion Podagrion Selys (Plate XIV) ..... 225

CAMPION, HERBERT. The antenodal reticulation of the wings of Agrionine dragonflies ..... 220

COCKERELL, T. D. A., Some Australian bees ..... 28

DALL, WILLIAM HEALEY. New species of the genus Mohnia from the North Pacific ..... 501

FOWLER, HENRY W. Notes on Catostomoid fishes ..... 45

Notes on the fishes of the Chincoteague region in Virginia ..... 61

Some type specimens of the American Cyprinoid fishes of the genus Rutilus ..... 66

Amphibians and reptiles from Ecuador, Venezuela, and Yucatan (Plates V–X) ..... 153

Fishes from the Madeira River ..... 517

Curimatus spilurus Cope, a wrongly identified Characin ..... 673

PAGE

HEATH, HAROLD. The anatomy of two Brazilian land shells, Anostoma depressum and Tomigerus clausus (Plate XXXI) ..... 688

HEBARD, MORGAN. A revision of the species of the genus Nemobius (Orthoptera: Gryllidæ) found in North America north of the Isthmus of Panama ..... 394

PALMER, T. CHALKLEY. The collecting and preparation of diatoms ..... 580

PILSBRY, HENRY A., SC.D. Notes on some Lower Californian Helices (Plates XV, XVI) ..... 380

REHN, JAMES A. G. Descriptions and records of South American Orthoptera, with the description of a new subspecies from Clarion Island ..... 82

A contribution to the knowledge of the Orthoptera of Argentina ..... 273

STONE, WITMER. On a collection of birds obtained by the Francis E. Bond Expedition in the Orinoco Delta and Paria Peninsula, Venezuela ..... 189

THOMPSON, J. C., M.D. Oxyrhopus trigeminus Duméril and Bibron the type of Erythroxyrhopus gen. nov. ..... 78

Notes on serpents in the family Colubridæ ..... 213

Contributions to the synonymy of serpents of the family Lapidæ ..... 508

VANATTA, E. G. Descriptions of new species of marine shells (Plate II) ..... 22

WEIDMAN, FRED D. A study of metazoan parasites found in the Philadelphia Zoological Garden (Plate IV) ..... 126

WHERRY, EDGAR T., PH.D. North border relations of the Triassic in Pennsylvania (Plate III) ..... 114